What we claimed is:

1. A recombinant plasmid vector pSNAV1/HO-1, comprising a heme oxygenase-1 (HO-1) gene.

2. An adeno-associated viral (AAV) vector cell strain, wherein the cell strain is obtained by transforming a cell with the recombinant plasmid vector of claim 1.

3. The AAV vector cell strain of claim 2, wherein the cell is a BHK-21 cell.

4. The AAV vector cell strain of claim 3, wherein the cell strain is BHK/HO-1.

5. A recombinant virus produced from the recombinant plasmid vector of claim 1.

6. A recombinant virus produced from the AAV vector cell strain of claim 2.

7. A recombinant virus produced from the AAV vector cell strain of claim 4.

8. The recombinant virus of claim 7, wherein the recombinant virus is rAAV/HO-1.

9. A process for the production of the recombinant adeno-associated virus rAAV/HO-1, the process comprising transforming a host cell with the recombinant plasmid vector pSNAV1/HO-1 having an HO-1 gene, and transfecting the host cell with recombinant virus HSV1-rc.

10. The process of claim 9, wherein the host cell is a BHK cell.

11. A method of mediating expression of the HO-1 gene, wherein the method comprises administering an effective amount of a recombinant adeno-associated viral vector.

12. A method of preventing post-transplant chronic transplant rejection, wherein the method comprises administering an effective amount of the recombinant virus of claim 5.

13. A method of preventing post-transplant chronic transplant rejection, the method comprising administering an effective amount of the recombinant virus of claim 6.

14. A method of preventing post-transplant chronic allograft rejection, the method comprising expressing the HO-1 gene in grafts.

15. The method of claim 14, wherein expression of the HO-1 gene in grafts is mediated by a recombinant adeno-associated virus.

16. The method of claim 14, further comprising constructing a plasmid bearing the HO-1 gene, and producing a recombinant adeno-associated virus bearing the HO-1 gene.

17. The method of claim 14, wherein expressing the HO-1 gene in grafts can be carried out

by methods such as gene delivery method, protein delivery method and/or using substance for the induction of stable HO-1 expression.